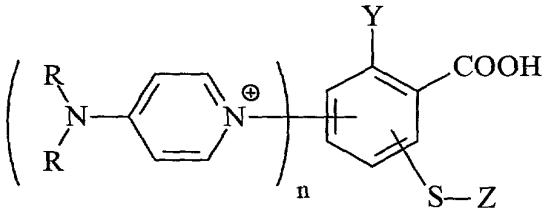
We claim:

1. A rhodamine dye or a salt thereof, comprising a rhodamine-type parent xanthene ring having attached to the xanthene C9 carbon a phenyl group that is further substituted with an ortho carboxy or ortho sulfonate group or a salt thereof, one to three substituted or unsubstituted aminopyridinium groups and a substituted or unsubstituted alkylthio, arylthio or heteroarylthio group, said rhodamine dye optionally including one or more linking moieties.

2. The rhodamine dye of Claim 1 which comprises the structure:



wherein:

n is 1, 2, or 3;

Y is a rhodamine-type parent xanthene ring attached to the illustrated phenyl group at the xanthene C9 carbon;

each R is independently selected from the group consisting of (C_1-C_6) alkyl and heteroalkyl, (C_5-C_{20}) aryl and heteroaryl, (C_6-C_{26}) arylalkyl and heteroalkyl, (C_5-C_{20}) arylaryl and heteroaryl-heteroaryl, or when taken together, R is (C_4-C_{10}) alkyldiyl, (C_4-C_{10}) alkyleno, heteroalkyldiyl and heteroalkyleno;

S is sulfur;

Z is (C_1-C_{12}) alkyl, (C_1-C_{12}) alkyl substituted with one or more of the same or different W^1 groups, (C_5-C_{20}) aryl and heteroaryl, and (C_5-C_{20}) aryl and heteroaryl substituted with one or more of the same or different W^2 groups;

W^1 is selected from the group consisting of –X, –R, =O, –OR, –SR, =S, –NRR, =NR, $-CX_3$, –CN, –OCN, –SCN, –NCO, –NCS, –NO, $-NO_2$, $=N_2$, $-N_3$, $-S(O)_2O^-$, $-S(O)_2OH$, $-S(O)_2R$, –C(O)R, –C(O)X, –C(S)R, –C(S)X, –C(O)OR, $-C(O)O^-$, –C(S)OR, –C(O)SR, –C(S)SR, –C(O)NRR, –C(S)NRR and –C(NR)NRR;

W^2 is selected from the group consisting of –R, –OR, –SR, –NRR, $-S(O)_2O^-$,

$-S(O)_2OH$, $-S(O)_2R$, –C(O)R, –C(O)X, –C(S)R, –C(S)X, –C(O)OR, $-C(O)O^-$, –C(S)OR, –C(O)SR, –C(S)SR, –C(O)NRR, –C(S)NRR and –C(NR)NRR;

each X is independently a halogen; and

Y or Z is optionally substituted with L where L is a bond or a linker.

3. The rhodamine dye of Claim 2 in which L is selected from a hydrophobic moiety, a charged group, a member of a pair of specific binding molecules, a photo-activatable group and a reactive functional group.

4. The rhodamine dye of Claim 2 where Z has the form Z^1-L-R_x, or a salt thereof, wherein:

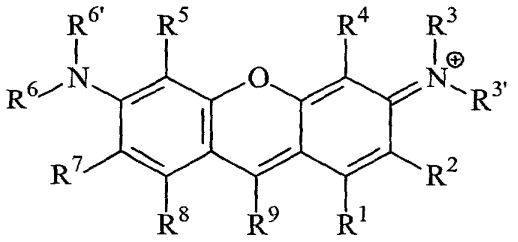
Z^1 is (C_1-C_{12}) alkyldiyl, (C_1-C_{12}) alkyldiyl independently substituted with one or more of the same or different W^1 groups, or

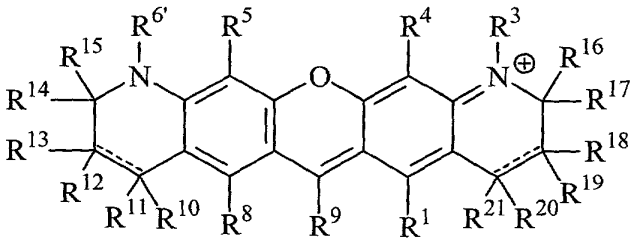
(C_5-C_{14}) aryldiyl, and aryldiyl, heteroaryldiyl and heteroaryldiyl independently substituted with one or more of the same or different W^2 groups;

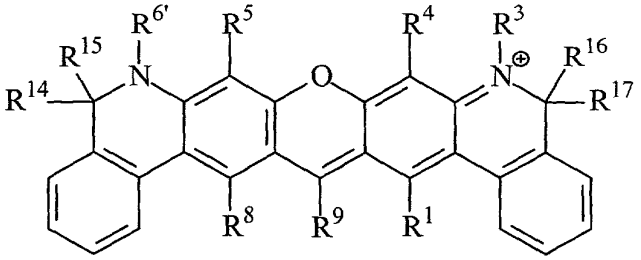
L is a bond or a linker; and

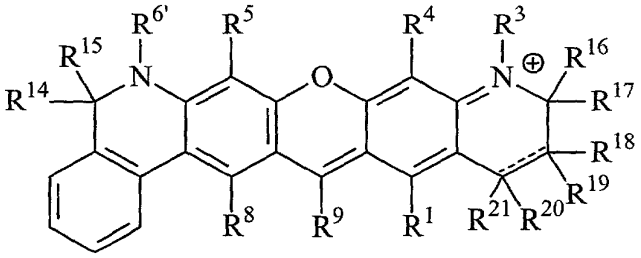
R_x is a reactive functional group.

5. The rhodamine dye of Claim 4 in which Y is selected from:

(Y-1)  ;

(Y-2)  ;

(Y-3)  ; and

(Y-4)  ,

and a salt thereof, wherein:

R^1 and R^2 when taken alone, are independently hydrogen or $(C_1$-$C_6)$ alkyl;

R^3 and $R^{3'}$ when taken alone, are independently selected from the group consisting of hydrogen, $(C_1$-$C_6)$ alkyl, $(C_5$-$C_{14})$ aryl and arylaryl, or when taken together is $(C_4$-$C_6)$ alkyldiyl or alkyleno, or when individually taken together with R^2 or R^4 is $(C_2$-$C_6)$ alkyldiyl or $(C_2$-$C_6)$ alkyleno;

R^4, when taken alone, is selected from the group consisting of hydrogen and $(C_1$-$C_6)$ alkyl, or when taken together with R^3 or $R^{3'}$ is $(C_2$-$C_6)$ alkyldiyl or alkyleno;

R^5, when taken alone, is selected from the group consisting of hydrogen and $(C_1$-$C_6)$ alkyl, or when taken together with R^6 or $R^{6'}$ is $(C_2$-$C_6)$ alkyldiyl or alkyleno;

R^6 and $R^{6'}$ when taken alone, are selected from the group consisting of hydrogen, $(C_1$-$C_6)$ alkyl, $(C_5$-$C_{14})$ aryl and arylaryl, or when taken together are $(C_4$-$C_6)$ alkyldiyl or alkyleno, or when individually taken together with R^5 or R^7 is $(C_2$-$C_6)$ alkyldiyl or alkyleno;

R^7, when taken alone, is selected from the group consisting of hydrogen and $(C_1$-$C_6)$ alkyl, or when taken together with R^6 or $R^{6'}$ is $(C_2$-$C_6)$ alkyldiyl or alkyleno;

R^8, when taken alone, is selected from the group consisting of hydrogen and $(C_1$-$C_6)$ alkyl;

R^9 indicates the point of attachment to the *ortho*-carboxyphenyl bottom ring; and

R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20} and R^{21} are each independently selected from the group consisting of hydrogen and $(C_1$-$C_6)$ alkyl, or

when R^{10}, R^{11}, R^{12} and R^{13} taken together are (C_5-C_{14}) aryleno or (C_5-C_{14}) aryleno substituted with one or more of the same or different (C_1-C_6) alkyl, or

when R^{18}, R^{19}, R^{20} and R^{21} taken together are (C_5-C_{14}) aryleno or aryleno substituted with one or more of the same or different (C_1-C_6) alkyl.

6. The rhodamine dye of Claim 5 wherein R^2, when taken together with R^3 or $R^{3'}$ is (C_2-C_6) alkyldiyl or alkyleno.

7. The rhodamine dye of Claim 6 wherein:

alkyl is methanyl, ethanyl or propanyl;

aryl is phenyl or naphthyl;

arylaryl is biphenyl;

alkyldiyl or alkyleno bridges formed by taking R^2 together with R^3 or $R^{3'}$, R^7 together with R^6 or $R^{6'}$, or R^4 together with and R^3 or $R^{3'}$, are ethano, propano, 1,1-dimethylethano, 1,1-dimethylpropano and 1,1,3-trimethylpropano;

aryleno bridges formed by taking R^1 together with R^2 are benzo or naphtho;

alkyldiyl or alkyleno bridge formed by taking R^3 together with $R^{3'}$, or R^6 together with $R^{6'}$, is butano;

alkyldiyl or alkyleno bridges formed by taking R^5 together with R^6 or $R^{6'}$ are ethano, propano, 1,1-dimethylethano, 1,1-dimethylpropano and 1,1,3-trimethylpropano; and

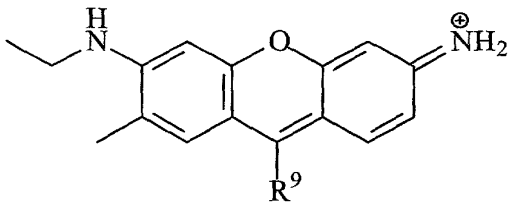
aryleno bridge formed by taking R^{10}, R^{11}, R^{12} and R^{13} together, or R^{18}, R^{19}, R^{20} and R^{21} together, is benzo.

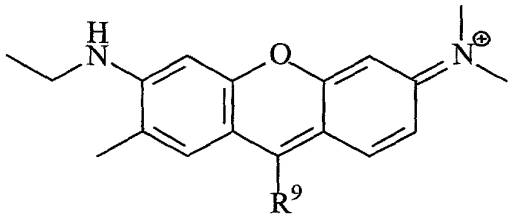
8. The rhodamine dye of Claim 6 in which L is a bond.

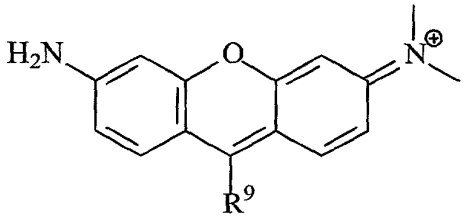
9. The rhodamine dye of Claim 4 in which R_x is selected from the group consisting of carboxyl, carboxylate, ester and activated ester.

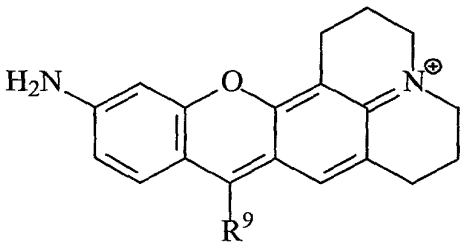
10. The rhodamine dye of Claim 4 in which Z^1 is selected from the group consisting of (C_1-C_{12}) alkyleno, (C_1-C_{12}) alkano, (C_5-C_{10}) aryldiyl and heteroaryldiyl, phenyldiyl, phena-1,4-diyl, naphthadiyl, naphtha-2,6-diyl, pyridindiyl and purindiyl.

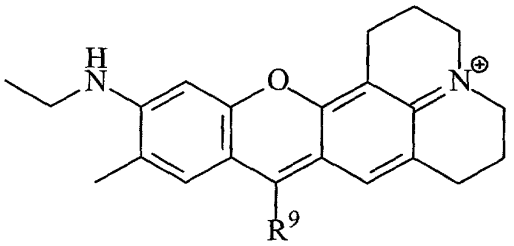
11. The rhodamine dye of Claim 4 in which Y is selected from the group consisting of:

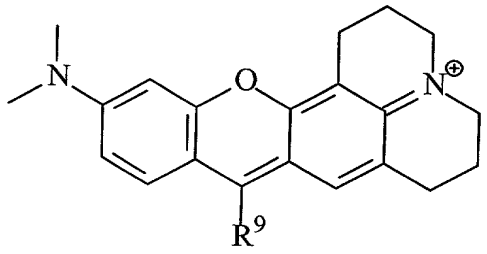
(Y-20a)  ;

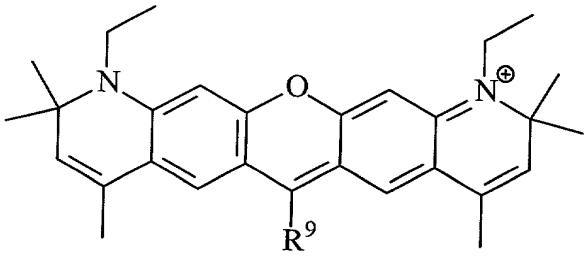
(Y-21a)  ;

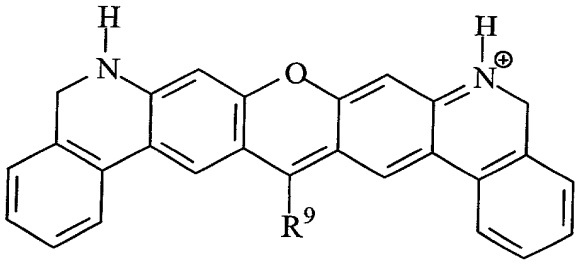
(Y-22a)  ;

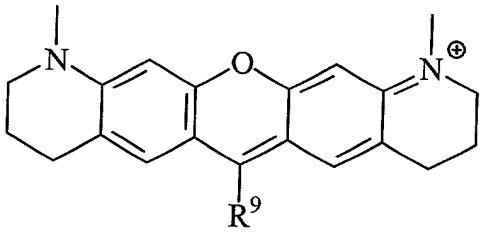
(Y-23a)  ;

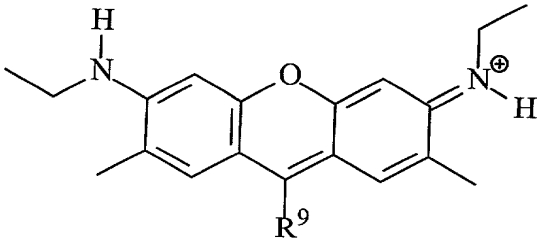
(Y-24a)  ;

(Y-25a)  ;

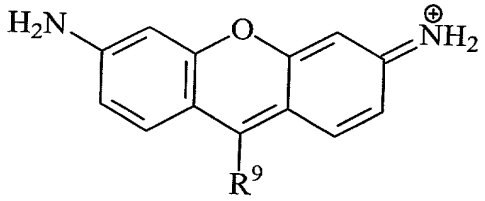
(Y-31a)  ;

(Y-34a)  ;

(Y-35a)  ;

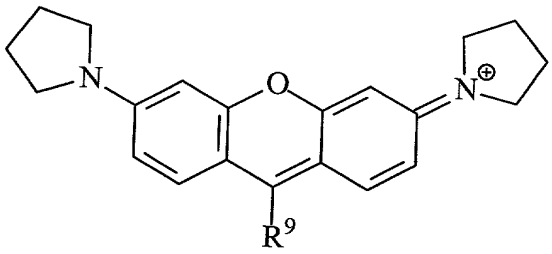
(Y-36a)  ;

(Y-39a)



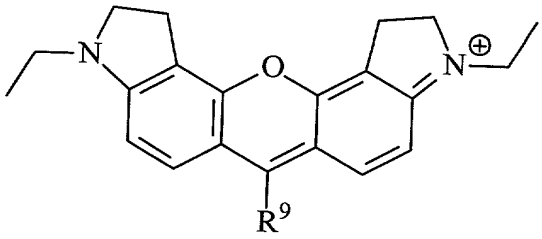
;

(Y-41a)



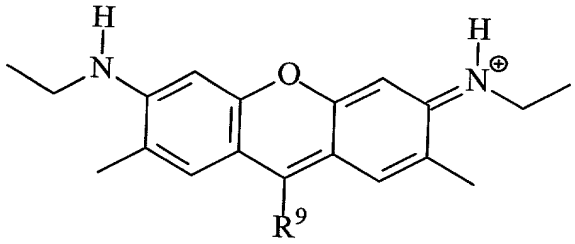
;

(Y-42a)



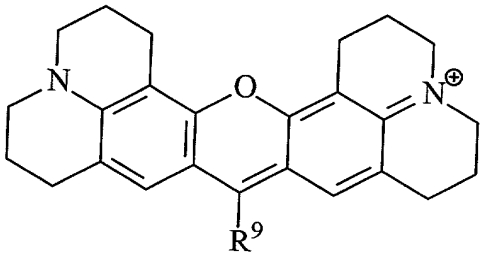
;

(Y-43a)

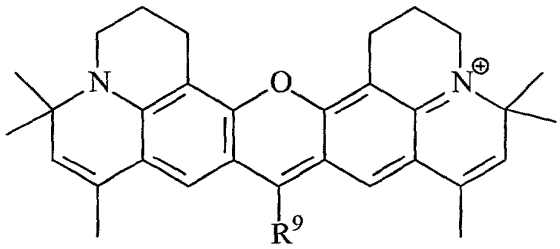


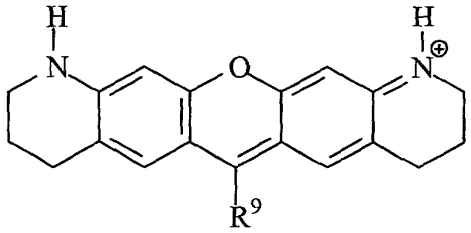
;

(Y-44a)



;

(Y-45a)  ; and

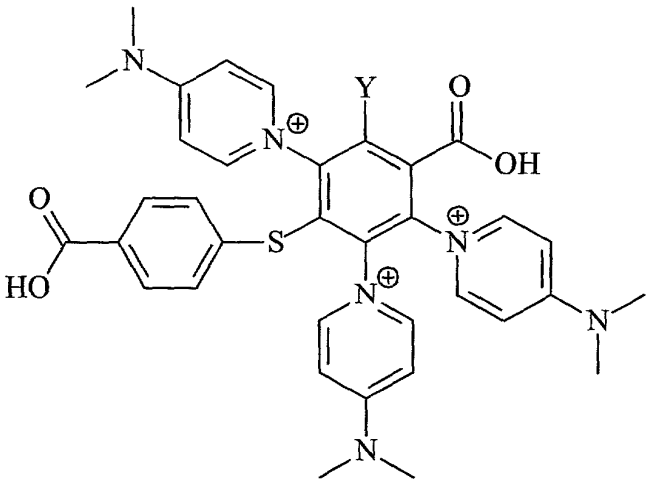
(Y-46a)  .

12. The rhodamine dye of Claim 4 in which L is a bond.

13. The rhodamine dye of Claim 4 in which R_x is selected from the group consisting of carboxyl, carboxylate, ester and activated ester.

14. The rhodamine dye of Claim 4 in which Z^1 is selected from the group consisting of (C_1-C_{12}) alkyleno, (C_1-C_{12}) alkano, (C_5-C_{10}) aryldiyl and heteroaryldiyl, phenyldiyl, phena-1,4-diyl, naphthadiyl, naphtha-2,6-diyl, pyridindiyl and purindiyl.

15. The rhodamine dye of Claim 4 which comprises the structure:

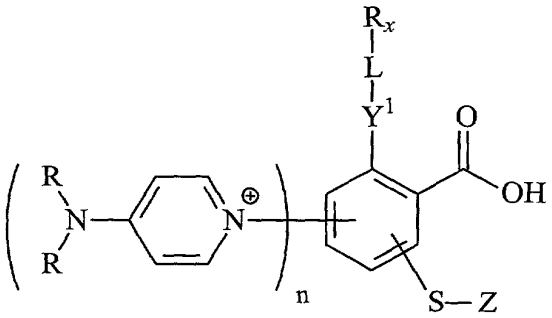


or a salt thereof.

16. The rhodamine dye of Claim 15 in which Y is selected from the group consisting of Y-1, Y-2, Y-3 and Y-4.

17. The rhodamine dye of Claim 15 in which Y is selected from the group consisting of Y-20a, Y-21a, Y-22a, Y-23a, Y-24a, Y-25a, Y-31a, Y-34a, Y-35a, Y-36a, Y-39a, Y-41a, Y-42a, Y-43a, Y-44a, Y-45a and Y-46a.

18. The rhodamine dye of Claim 2 which has the structure:



wherein:

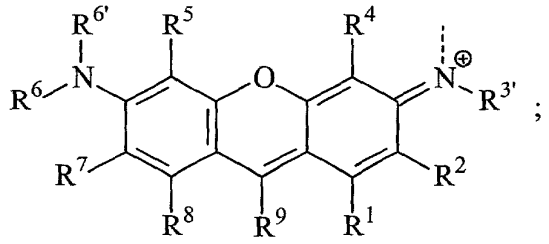
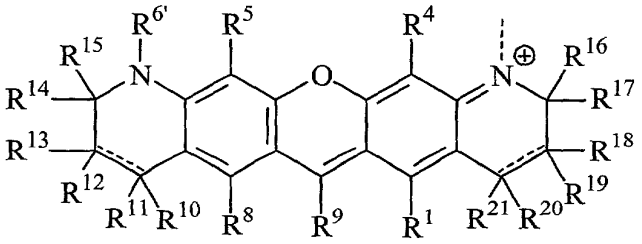
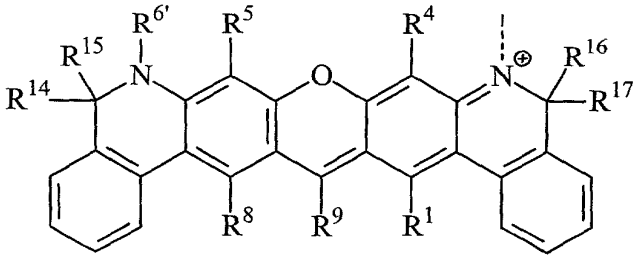
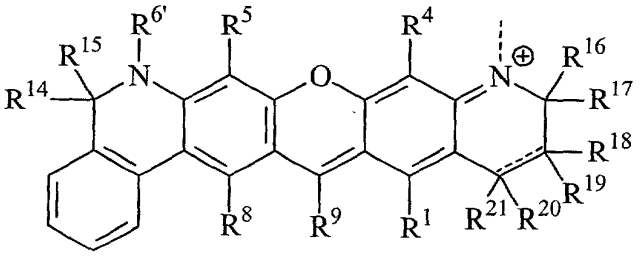
Y^1 is a rhodamine-type parent xanthene ring attached to the illustrated phenyl group at the xanthene C9 carbon;

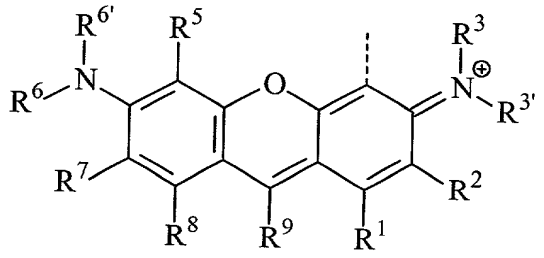
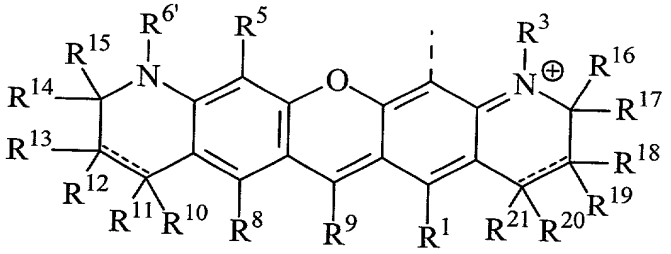
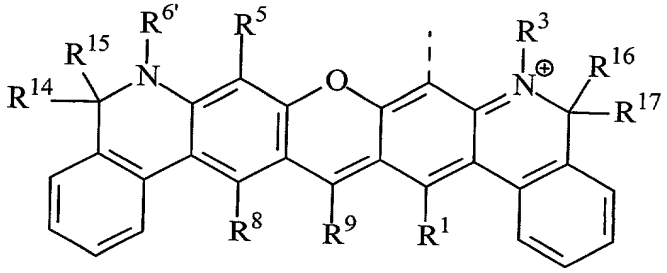
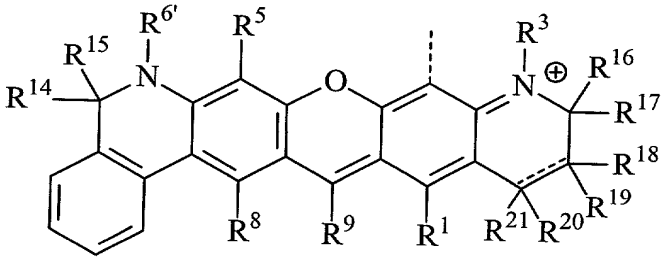
L is a bond or linker attached to a xanthene nitrogen atom or a xanthene C4 carbon;

n is 1, 2, or 3; and

R_x is a reactive functional group.

19. The rhodamine dye of Claim 18 in which Y^1 is selected from the group consisting of:

(Y-1b)	 ;
(Y-2b)	
(Y-3b)	
(Y-4b)	

(Y-1c)	
(Y-2c)	
(Y-3c)	
(Y-4c)	

wherein the dashed line at the nitrogen or C4 atom indicates the point of attachment of substituent L.

20. The rhodamine dye of Claim 19 wherein:

alkyl is methanyl, ethanyl or propanyl;

aryl is phenyl or naphthyl;

arylaryl is biphenyl;

alkyldiyl or alkyleno bridges formed by taking R^2 together with R^3, R^4 together

with $R^{3'}$, R^5 together with R^6, or R^7 together with $R^{6'}$, are ethano, propano, 1,1-dimethylethano, 1,1-dimethylpropano and 1,1,3-trimethylpropano;

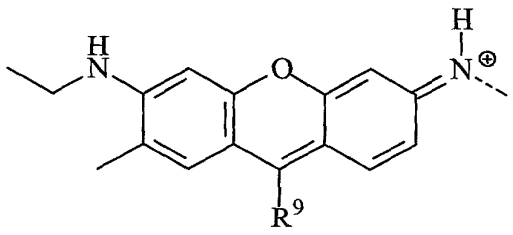
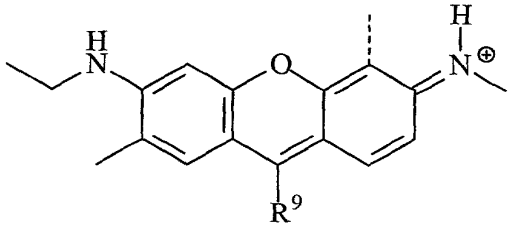
aryleno bridges formed by taking R^{10}, R^{11}, R^{12} and R^{13} together or R^{18}, R^{19}, R^{20} and R^{21} together are benzo.

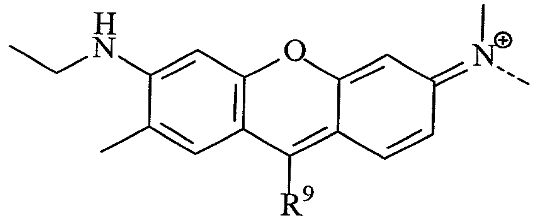
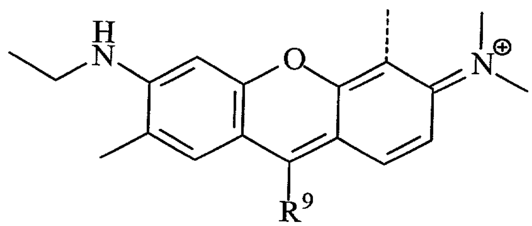
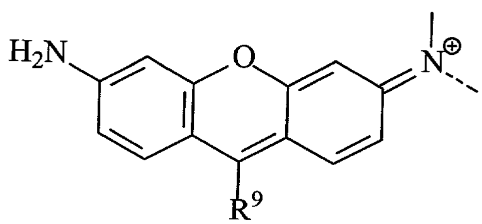
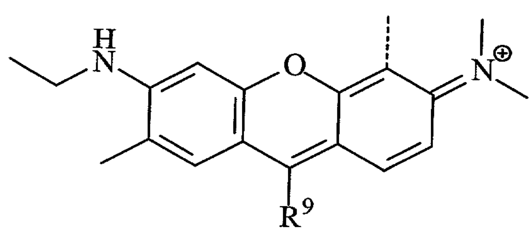
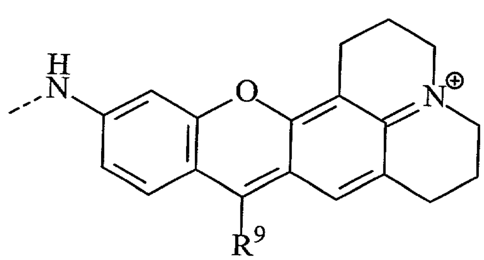
21. The rhodamine dye of Claim 18 in which L is selected from the group consisting of $(C_1\text{-}C_6)$ alkyldiyl, $(C_1\text{-}C_6)$ alkano, $(C_5\text{-}C_{20})$ aryldiyl, phenyldiyl, phena-1,4-diyl, naphthyldiyl, naphtha-2,6-diyl, naphtha-2,7-diyl, $(C_6\text{-}C_{26})$ arylalkyldiyl $-(CH_2)_i-\phi-$ and $-(CH_2)_i-\psi-$, where each *i* is independently an integer from 1 to 6, ϕ is $(C_5\text{-}C_{20})$ aryldiyl, phenyldiyl or phena-1,4-diyl and ψ is naphthyldiyl, naphtha-2,6-diyl or naphtha-2,7-diyl.

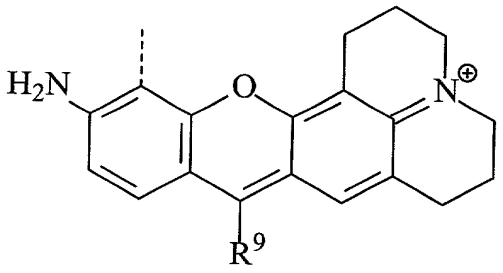
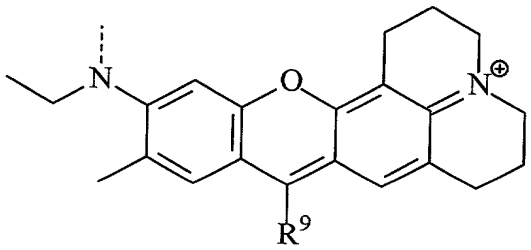
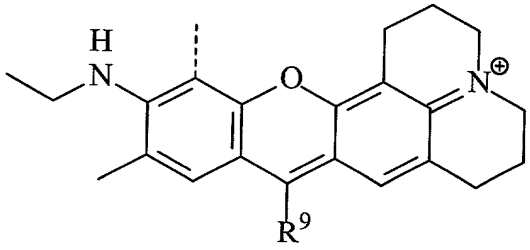
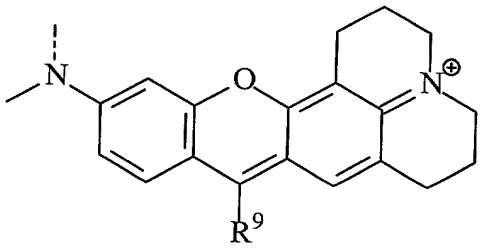
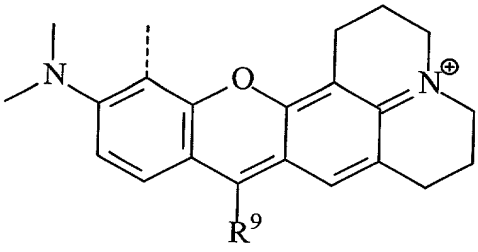
22. The rhodamine dye of Claim 18 in which R_x is selected from the group consisting of carboxyl, carboxylate, ester and activated ester.

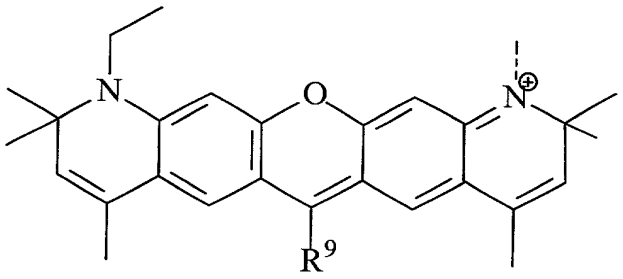
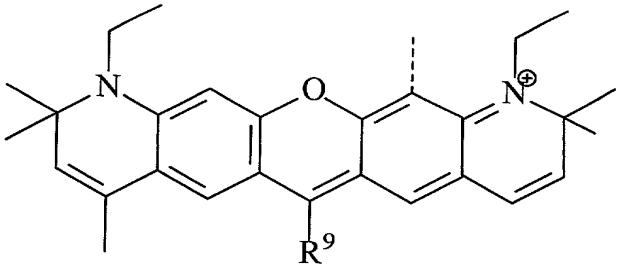
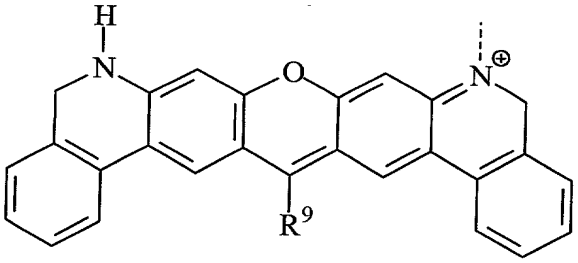
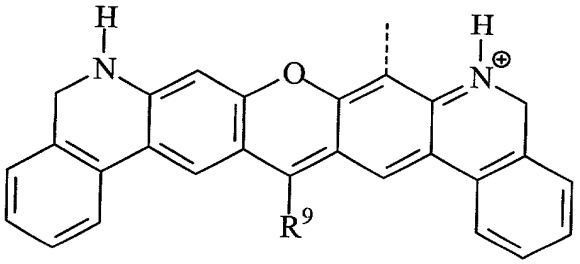
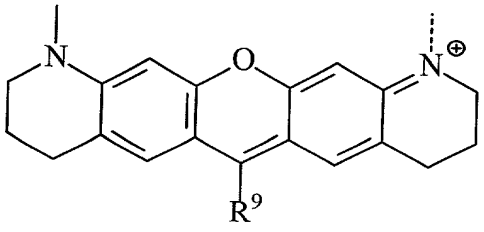
23. The rhodamine dye of Claim 18 in which Z is selected from the group consisting of $(C_1\text{-}C_{12})$ alkyl, $(C_1\text{-}C_{12})$ alkanyl, $(C_5\text{-}C_{10})$ aryl and heteroaryl, phenyl, naphthyl, naphth-1-yl, naphth-2-yl, pyridyl and purinyl.

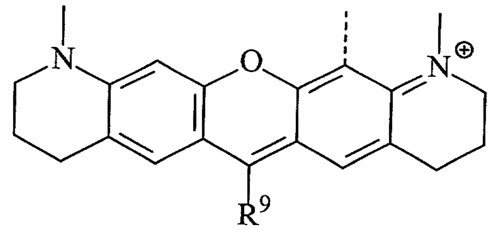
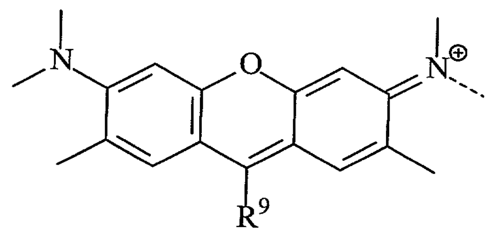
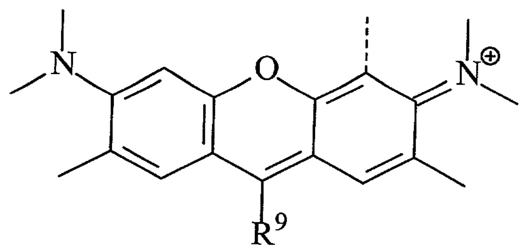
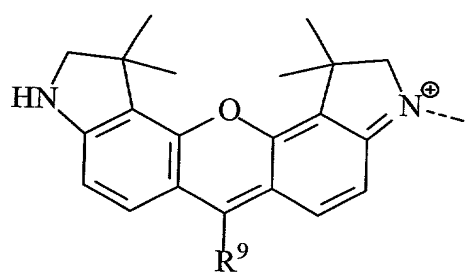
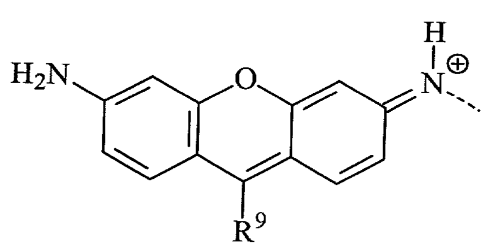
24. The rhodamine dye of Claim 18 in which Y^1 is selected from the group consisting of:

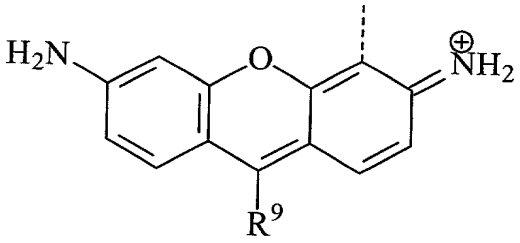
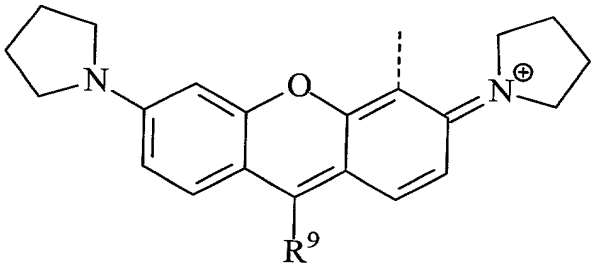
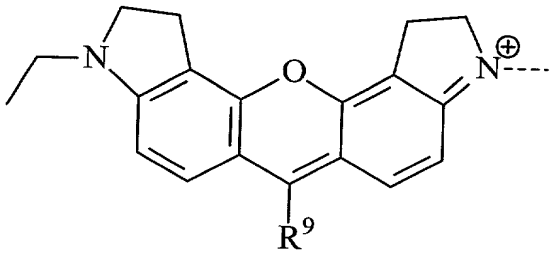
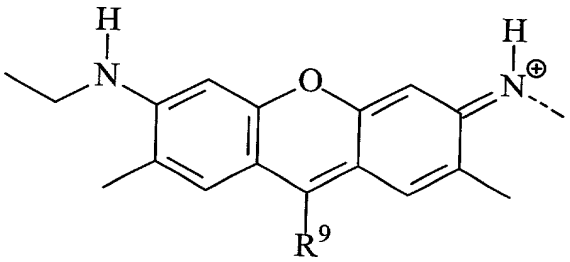
(Y-20b)	
(Y-20c)	

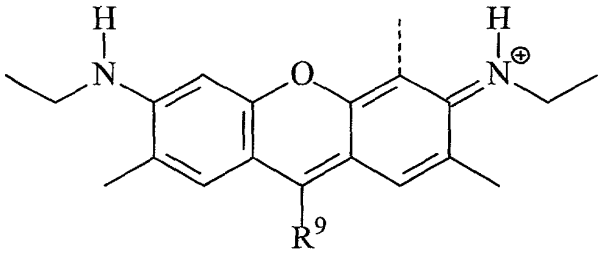
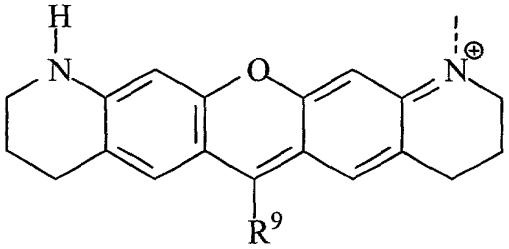
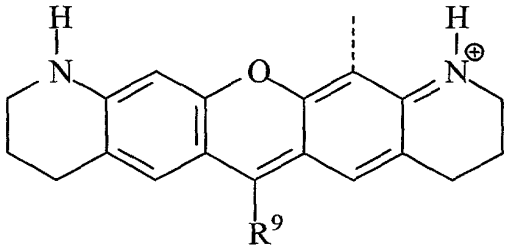
(Y-21b)	
(Y-21c)	
(Y-22b)	
(Y-22c)	
(Y-23b)	

(Y-23c)	
(Y-24b)	
(Y-24c)	
(Y-25b)	
(Y-25c)	

(Y-31b)	
(Y-31c)	
(Y-34b)	
(Y-34c)	
(Y-35b)	

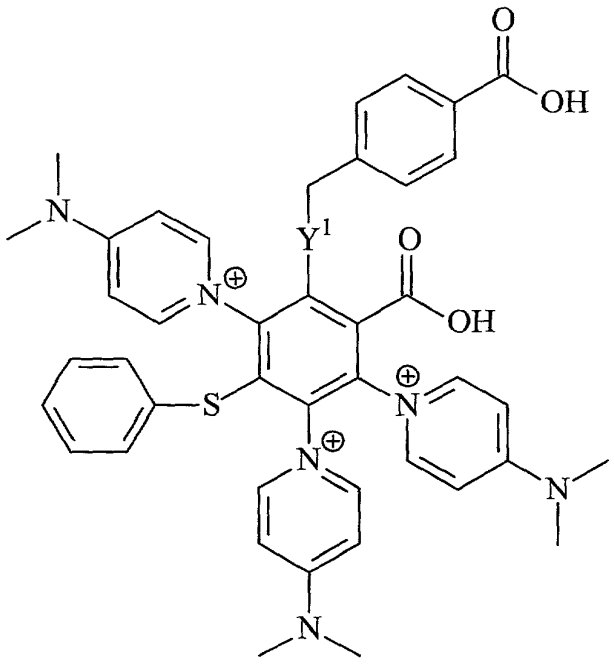
(Y-35c)	
(Y-36b)	
(Y-36c)	
(Y-37b)	
(Y-39b)	

(Y-39c)	
(Y-41c)	
(Y-42b)	
(Y-43b)	

(Y-43c)	
(Y-46b)	
(Y-46c)	

wherein R^9 and the dash at the nitrogen or C4 atom indicates the point of attachment of L.

25. The rhodamine dye of Claim 18 which has the structure:



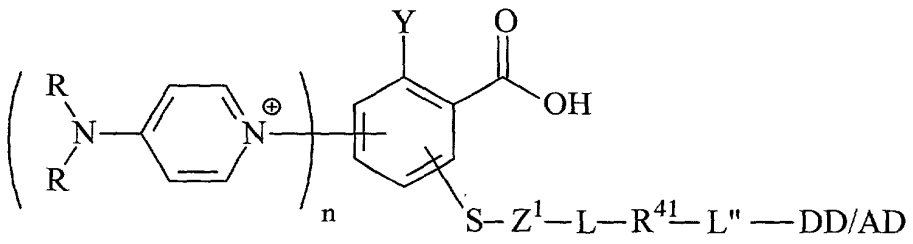
or a salt thereof.

26. The rhodamine dye of Claim 25 in which Y^1 is selected from the group consisting of Y-1b, Y-2b, Y-3b, Y-4b, Y-1c, Y-2c, Y-3c and Y-4c.

27. The rhodamine dye of Claim 25 in which Y^1 is selected from the group consisting of Y-20b, Y-20c, Y-21b, Y-21c, Y-22b, Y-22c, Y-23b, Y-23c, Y-24b, Y-24c, Y-25b, Y-25c, Y-31b, Y-31c, Y-34b, Y-34c, Y-35b, Y-35c, Y-36b, Y-36c, Y-37b, Y-39b, Y-39c, Y-41c, Y-42b, Y-43b, Y-43c, Y-46b and Y-46c.

28. An energy-transfer dye pair comprising a donor dye linked to an acceptor dye, wherein the donor dye or the acceptor dye is a compound according to Claim 1 and either or both of said donor and acceptor dyes include an optional linking moiety.

29. The dye pair of Claim 28 which has the structure:



or a salt thereof, wherein:

R^{41} is a covalent linkage formed upon reaction between a nucleophile and an electrophile;

L" is a bond or a linker;

n is 1, 2, or 3; and

DD/AD is a donor dye or an acceptor dye which includes a linking moiety.

30. The dye pair of Claim 29 in which Y is selected from the group consisting of Y-1, Y-2, Y-3, Y-4, Y-20a, Y-21a, Y-22a, Y-23a, Y-24a, Y-25a, Y-31a, Y-34a, Y-35a, Y-36a, Y-39a, Y-41a, Y-42a, Y-43a, Y-44a, Y-45a and Y-46a.

31. The dye pair of Claim 29 in which L is a bond.

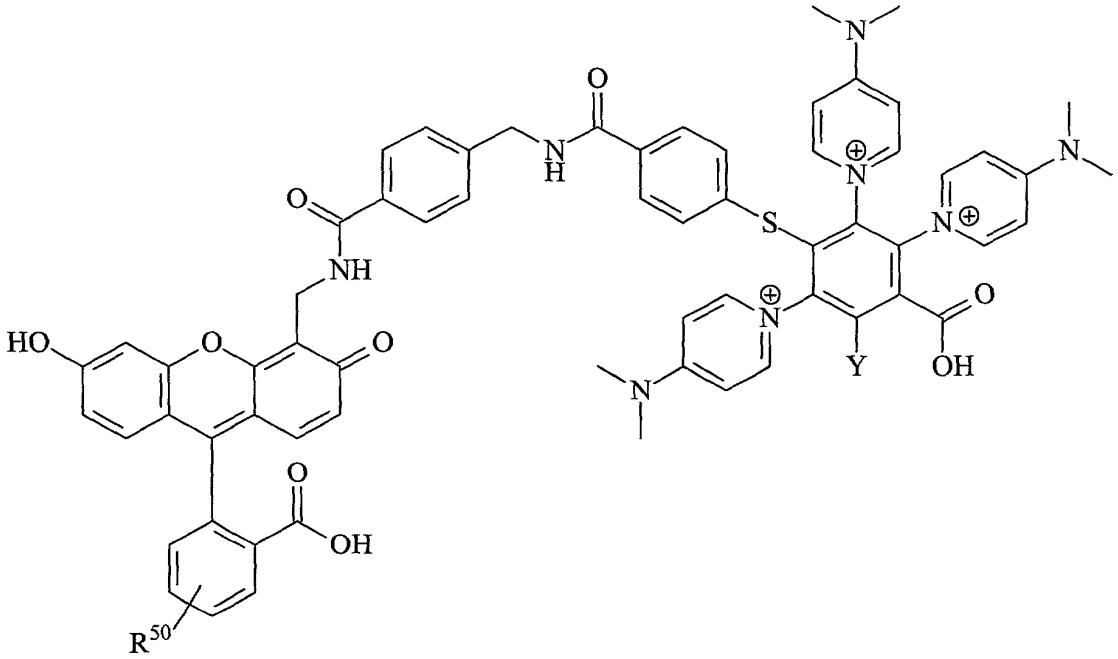
32. The dye pair of Claim 29 in which R^{41} has the formula $-C(O)NR^{45}-$, where R^{45} is hydrogen or (C_1-C_6) alkyl.

33. The dye pair of Claim 29 in which Z^1 is selected from the group consisting of (C_1-C_{12}) alkyleno, (C_1-C_{12}) alkano, (C_5-C_{10}) aryldiyl and heteroaryldiyl, phenyldiyl, phena-1,4-diyl, naphthadiyl, naphtha-2,6-diyl, pyridindiyl and purindiyl.

34. The dye pair of Claim 29 in which L" is $-R^{43}-Z^3-C(O)-R^{44}-R^{45}-$, wherein R^{43} is (C_1-C_6) alkyldiyl, preferably (C_1-C_3) alkano, and is bonded to R^{42}, where R^{42} is O, S or NH; Z^3 is 5-6 membered cyclic alkenyldiyl and heteroalkenyldiyl, (C_5-C_{14}) aryldiyl and heteroaryldiyl; R^{44} is O, S or NH; and R^{45} is (C_1-C_6) alkyldiyl, preferably (C_1-C_3) alkano.

35. The dye pair of Claim 29 in which DD/AD is a fluorescein dye in which the linking moiety is a reactive functional group and wherein L" is attached to the fluorescein dye at the xanthene C4 carbon.

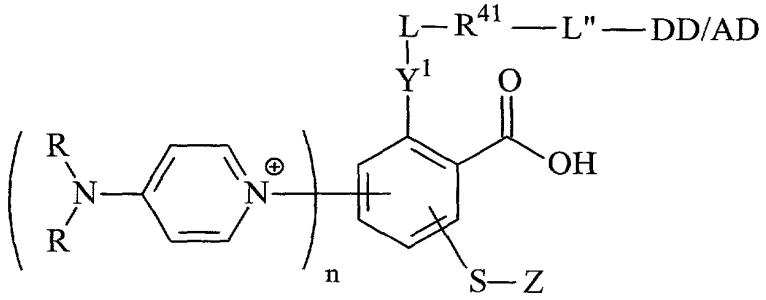
36. The dye pair of Claim 29 which has the structure:



wherein, R^{50} is a carboxyl, a salt, ester or activated ester thereof.

37. The dye pair of Claim 36 in which Y is selected from the group consisting of Y-1, Y-2, Y-3, Y-4, Y-20a, Y-21a, Y-22a, Y-23a, Y-24a, Y-25a, Y-31a, Y-34a, Y-35a, Y-36a, Y-39a, Y-41a, Y-42a, Y-43a, Y-44a, Y-45a and Y-46a.

38. The dye pair of Claim 28 which has the structure:



wherein:

R^{41} is a covalent linkage formed upon reaction between a nucleophile and an electrophile;

L" is a bond or a linker;

n is 1, 2, or 3; and

DD/AD is a donor dye or an acceptor dye which includes a linking moiety.

39. The dye pair of Claim 38 in which Y^1 is selected from the group consisting of Y-1b, Y-2b, Y-3b, Y-4b, Y-1c, Y-2c, Y-3c, Y-4c, Y-20b, Y-20c, Y-21b, Y-21c, Y-22b, Y-22c, Y-23b, Y-23c, Y-24b, Y-24c, Y-25b, Y-25c, Y-31b, Y-31c, Y-34b, Y-34c, Y-35b, Y-35c, Y-36b, Y-36c, Y-37b, Y-39b, Y-39c, Y-41c, Y-42b, Y-43b, Y-43c, Y-46b and Y-46c.

40. The dye pair of Claim 38 in which L is $(C_1\text{-}C_6)$ alkyldiyl or $(C_1\text{-}C_3)$ alkano.

41. The dye pair of Claim 38 in which R^{41} is an amide of the formula $-C(O)NR^{45}-$, where R^{45} is hydrogen or $(C_1\text{-}C_6)$ alkyl.

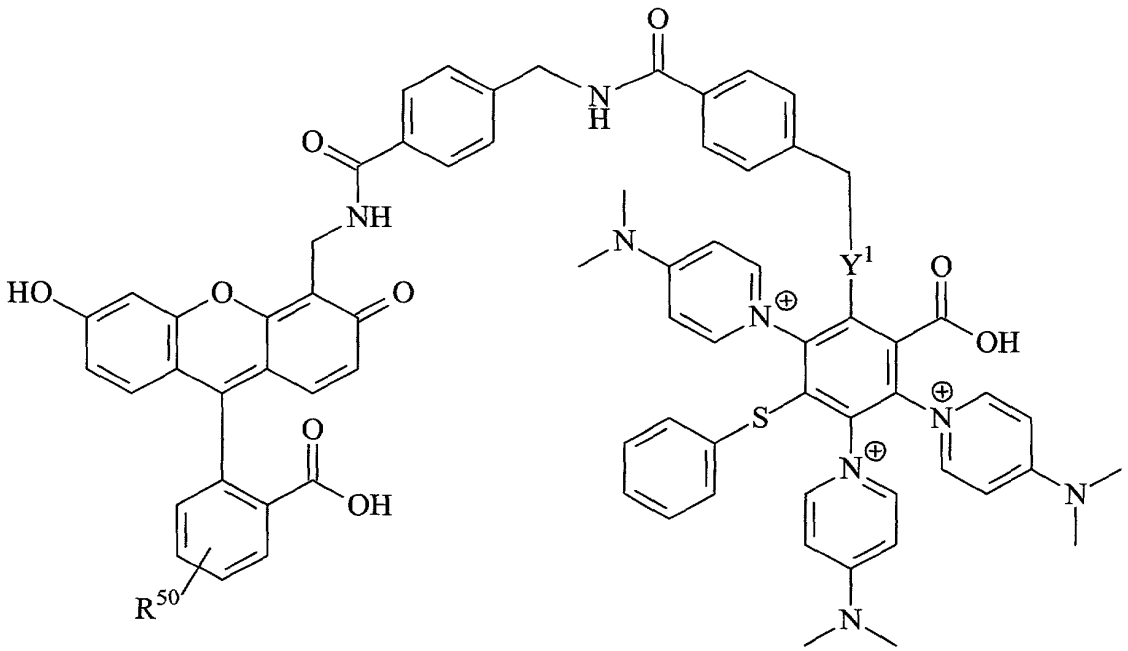
42. The dye pair of Claim 38 in which Z is selected from the group consisting of $(C_1\text{-}C_{12})$ alkyl, $(C_1\text{-}C_{12})$ alkanyl, $(C_5\text{-}C_{10})$ aryl and heteroaryl, phenyl, naphthyl, naphth-1yl, naphth-2-yl, pyridyl and purinyl.

43. The dye pair of Claim 38 in which L" is $-R^{43}-Z^3-C(O)-R^{44}-R^{45}-$, wherein R^{43} is $(C_1\text{-}C_6)$ alkyldiyl, preferably $(C_1\text{-}C_3)$ alkano, and is bonded to R^{42} , where R^{42} is O, S or NH; Z^3 is 5-6 membered cyclic alkenyldiyl and heteroalkenyldiyl, $(C_5\text{-}C_{14})$ aryldiyl and heteroaryldiyl; R^{44} is

O, S or NH; and R^{45} is (C_1-C_6) alkyldiyl, preferably (C_1-C_3) alkano.

44. The dye pair of Claim 38 in which DD/AD is a fluorescein dye in which the linking moiety is a reactive group R_x and wherein L" is attached to the fluorescein dye at the xanthene C5 carbon.

45. The dye pair of Claim 38 which has the structure:



wherein:

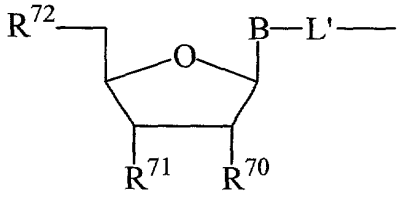
Y^1 is selected from the group consisting of Y-20b, Y-20c, Y-21b, Y-21c, Y-22b, Y-22c, Y-23b, Y-23c, Y-24b, Y-24c, Y-25b, Y-25c, Y-31b, Y-31c, Y-34b, Y-34c, Y-35b, Y-35c, Y-36b, Y-36c, Y-37b, Y-39b, Y-39c, Y-41c, Y-42b, Y-43b, Y-43c, Y-46b and Y-46c; and

R^{50} is a carboxyl, a salt, ester or activated ester thereof.

46. The dye pair of Claim 45 in which Y^1 is selected from the group consisting of Y-1b, Y-2b, Y-3b, Y-4b, Y-1c, Y-2c, Y-3c, Y-4c, Y-20b, Y-20c, Y-21b, Y-21c, Y-22b, Y-22c, Y-23b, Y-23c, Y-24b, Y-24c, Y-25b, Y-25c, Y-31b, Y-31c, Y-34b, Y-34c, Y-35b, Y-35c, Y-36b, Y-36c, Y-37b, Y-39b, Y-39c, Y-41c, Y-42b, Y-43b, Y-43c, Y-46b and Y-46c.

47. A labeled nucleoside/tide or nucleoside/tide analog comprising the rhodamine dye of Claim 2 where Z has the form Z^1-L-R^{46}-L'-NUC, wherein:

R^{46} is a linkage formed by reaction between an electrophile and a nucleophile; and –L'–NUC taken together has the structure:

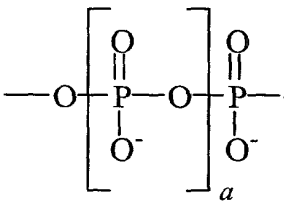


wherein:

B is a nucleobase;

L' is (C_1-C_{20}) alkyldiyl and heteroalkyldiyl, (C_1-C_{20}) alkyleno and heteroalkyleno, (C_2-C_{20}) alkyno and heteroalkyno, or (C_2-C_{20}) alkeno and heteroalkeno;

R_{70} and R_{71},when taken alone, are each independently selected from the group consisting of hydrogen, hydroxyl and a moiety which blocks polymerase-mediated template-directed polymerization, or when taken together form a bond such that the illustrated sugar is 2',3'-didehydroribose; and

R_{72} is selected from the group consisting of hydroxyl, a phosphate ester having the formula  , where *a* is an integer from 0 to 2, and a phosphate ester analog, or a salt thereof.

48. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 where Z has the form Z^1-L-R^{41}-L''-DD/AD-L^3-R^{46}-L'-NUC, or a salt thereof, wherein:

R^{41} is a covalent linkage formed upon reaction between a nucleophile and an electrophile;

L" is a bond or a linker;

DD/AD is a donor dye or an acceptor dye which includes a linking moiety; and.

L^3 is a bond or a linker.

49. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 where Y has the form Y^1-R^{41}-L"-DD/AD-L^3-R^{46}-L'-NUC, or a salt thereof wherein:

Y^1 is Y-1, Y-2, Y-3, or Y-4;

R^{41} is a covalent linkage formed upon reaction between a nucleophile and an electrophile;

L" is a bond or a linker;

DD/AD is a donor dye or an acceptor dye which includes a linking moiety; and.

L^3 is a bond or a linker.

50. A labeled nucleoside/tide or nucleoside/tide analog of Claim 47 where Y has the form Y^1-R^{41}-L"-DD/AD and Z has the form Z^1-L-R^{46}-L'-NUC, or a salt thereof; wherein:

Y^1 is Y-1, Y-2, Y-3, or Y-4;

R^{41} is a covalent linkage formed upon reaction between a nucleophile and an electrophile;

L" is a bond or a linker;

DD/AD is a donor dye or an acceptor dye which includes a linking moiety; and

Z^1 is (C_1-C_{12}) alkyldiyl, (C_1-C_{12}) alkyldiyl independently substituted with one or more of the same or different W^1 groups, (C_5-C_{14}) aryldiyl, and (C_5-C_{14}) aryldiyl, heteroaryldiyl and heteroaryldiyl independently substituted with one or more of the same or different W^2 groups.

51. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47, 48, 49 or 50 which is enzymatically incorporatable.

52. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47, 48, 49 or 50 which is a terminator.

53. The lableled nucleoside/tide or nucleoside/tide analog of Claim 47, 48, 49 or 50 which is enzymatically extendable.

54. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 in which L' is selected from the group consisting of:

propargyl, where the terminal *sp* carbon is covalently attached to nucleobase B and the terminal methylene (sp^3) carbon is covalently attached to F_x; and

–C≡C–CH_2–O–CH_2–CH_2–NR^{47}–R^{48}–, where R^{47} is hydrogen or (C_1-C_6) alkyl and R^{48} is –C(O)–$(CH_2)_r$–, –C(O)–CHR^{49}–, –C(O)–C≡C–CH_2– or –C(O)–ϕ–$(CH_2)_r$–, where each *r* is independently an integer from 1 to 5 and ϕ is C_6 aryldiyl or heteroaryldiyl and R^{49} is hydrogen, (C_1-C_6) alkyl or a side chain of an encoding or non-encoding amino acid, and where the terminal *sp* carbon is covalently attached to nucleobase B and the other terminal group is covalently attached to F_x.

55. The labeled nucleoside/tide or nucleoside/tide analog of Claim 48 or Claim 49 in which L^3 is a bond, R^{46} the formula –C(O)–NHR^{51}, where R^{51} is hydrogen or (C_1-C_6) alkyl.

56. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 in which nucleobase B is a purine, a 7-deazapurine, an 8-aza,7-deazapurine, a pyrimidine, a normal nucleobase or a common analog of a normal nucleobase.

57. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 or Claim 48 in which Y is selected from the group consisting of Y-1, Y-2, Y-3 and Y-4.

58. The labeled nucleoside/tide or nucleoside/tide analog of Claim 47 or Claim 48 in which Y is selected from the group consisting of Y-20a, Y-21a, Y-22a, Y-23a, Y-24a, Y-25a, Y-31a, Y-34a, Y-35a, Y-36a, Y-39a, Y-41a, Y-42a, Y-43a, Y-44a, Y-45a and Y-46a.

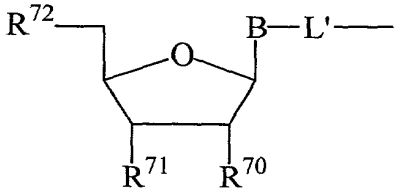
59. The labeled nucleoside/tide or nucleoside/tide analog of Claim 49 or Claim 50 in which Y^1 is selected from the group consisting of Y-1b, Y-2b, Y-3b, Y-4b, Y-1c, Y-2c, Y-3c and Y-4c.

60. The labeled nucleoside/tide or nucleoside/tide analog of Claim 49 or Claim 50 in which Y^1 is selected from the group consisting of Y-20b, Y-20c, Y-21b, Y-21c, Y-22b, Y-22c, Y-23b, Y-23c, Y-24b, Y-24c, Y-25b, Y-25c, Y-31b, Y-31c, Y-34b, Y-34c, Y-35b, Y-35c, Y-36b, Y-36c, Y-37b, Y-39b, Y-39c, Y-41c, Y-42b, Y-43b, Y-46b and Y-46c.

61. A polynucleotide labeled with a rhodamine dye according to Claim 1 or an energy-transfer dye pair according to Claim 28.

62. A method of generating a labeled primer extension product, comprising the step of enzymatically extending a primer-target hybrid in the presence of a mixture of enzymatically-extendable nucleotides capable of supporting continuous primer extension and a terminator, wherein said primer or said terminator is labeled with a rhodamine dye according to Claim 1 or an energy-transfer dye pair according to Claim 28.

63. The method of Claim 62 in which the terminator has the structure:



wherein R_{70} and R_{71}, when taken alone, are each independently selected from the group consisting of hydrogen, halide, and any moiety which blocks polymerase-mediated template-directed polymerization.

64. The method of Claim 62 in which the terminator is a mixture of four different terminators, one which terminates at a template A, one which terminates at a template G, one which terminates at a template C and one which terminates at a template T or U.

65. The method of Claim 62 in which each of the four different terminators is labeled with a different, spectrally-resolvable fluorophore.

66. A labelled rhodamine dye-polypeptide conjugate comprising the rhodamine dye of Claim 1 and a polypeptide, wherein the polypeptide is selected from the group consisting of a peptide, a protein, and an antibody.

67. A method of detecting a rhodamine dye-antibody conjugate, in which said conjugate is a rhodamine dye-antibody conjugate according to Claim 66, comprising the steps of:

(a) binding the conjugate to a peptide or protein, and

(b) detecting the rhodamine dye-antibody conjugate bound to the peptide or protein.

68. The method of Claim 67 in which the conjugate is bound to the peptide or protein in the presence of a second antibody specific for binding said peptide or protein.

69. The method of Claim 68 in which the second antibody is bound to a solid bead or particle.